**Low-Yield Wells (ERT)**

- ERT stated that EPA and USGS both have opinions on low-yield well sampling.
- EPA often samples low-yield wells.
- Samples were collected accordance with EPA's 1986 RCRA Ground-Water Monitoring Technical Enforcement Guidance Document (TEGD). (see attached file page 103).
- The detection of glycols in the wells would not attribute to low-yield.

**Option:**

- To increase yield within the well it might be necessary to redevelop the well using surge blocks.
- Surge Block: A surge block is a flat seal that closely fits the casing interior and is operated like a plunger beneath the water level. Because it seals closely to the casing, it has a very direct positive action on the movement in the well

**Pavillion Well Construction Summary (ERT and OW)**

- Although stainless steel is ideal, steel casing is often used in construction of drinking water and monitoring wells.
- Corrosion of steel casing should not impact sample results.
- EPA's chemical analysis of corrosion material found in MW02 found that the metals from the rust were barely identified in the water sampled and could in no way have affected the sampling results.
- The pump installed in the wells was stainless steel and positioned at the top of the screen interval. When the well is at steady state, water being sampled would only come in contact with the pump and well screen (both are stainless steel) and not the well casing.
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| Document | Screen | Casing |
|---|---|---|
| EPA QAPP | well screen materials to ensure a minimum internal diameter (ID) of 4 inches. | casing materials to ensure a minimum internal diameter of 4 inches. |
| Shaw QAPP | 4" ID threaded stainless steel | 4" steel riser |
| Shaw Workplan | 5" ID threaded stainless steel | 5" ID flush-threaded steel casing or Schedule 80 PVC |
| Draft Report | Stainless steel | 4" stainless steel |
| WY Well Standards | Factory screen casing is recommended for the perforated section of the well. | Allows for ASTM A53 |
| As built | Stainless steel | 4" ASTM A53 (carbon steel alloy) |

**Casing:** The purpose of casing is to provide access to the subsurface for sampling of ground water and measurement of water levels.

**Screen:** The screen provides an access point to a specific portion of a ground water zone, as well as providing a barrier to keep unwanted formation particles out of ground water samples.